APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
HO, CHUONG T

ART UNIT	PAPER NUMBER
2616	

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05/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/909,190	KRANSMO ET AL.
	Examiner	Art Unit
	CHUONG T. HO	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2004*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,4,7,11,13,14,16,17,19,20,22,24,27,28,30,32,33,36,38 and 39* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,4,7,11,13,14,16,17,19,20,22,24,27,28,30,32,33,36,38 and 39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

1.   The amendment filed 02/06/07 have been entered and made of record.

2.   Applicant's arguments with respect to claims 3-4, 7, 14, 11, 13, 16-17, 19-20, 22,

24, 27-28, 30, 32-33, 36, 39, 38 have been considered but are moot in view of the new

ground(s) of rejection.

3.   Claims 3-4, 7, 14, 11, 13, 16-17, 19-20, 22, 24, 27-28, 30, 32-33, 36, 39, 38 are

pending.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

5.   Claims 3, 4, 7, 16, 17, 32, 33 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Laiho (U.S.Patent No. 6,061,572) in view of Nguyen et al.

(U.S.Patent No. 2002/0111167).

As to claim 3, Laiho discloses a telecommunication system for delivering a Short

Message Service (SMS) message within a network capable of providing both voice

services on a voice carrier and data services on a data only carrier, said

telecommunication system comprising:

A mobile station (MS) supporting both voice services and data services, said MS being currently involved in a data session on said data only carrier (col. 1, line 56; col. 1, line 63; col. 3, lines 39-40);

A node in wireless communication with said MS for receiving said SMS message encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS as an electronic mail message over said data only carrier without disrupting said data session (col. 3, lines 45-51);

Wherein said node further operates to check whether said MS is involved in said data session prior to encapsulating said SMS message into said IP packet, said node transmitting said SMS message to said MS when said MS is not involved in said data session (col. 3, lines 37-38).

However, Laiho (6,061,572) is silent to disclosing wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node encapsulating said SMS message into said IP packet only when said node has received said feature code.

Nguyen et al. discloses wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node encapsulating said SMS message into said IP packet only when said node has received said feature code ([0016], The called MS has a Home Location Register (HLR) 15 that stores the called MS's user profile, status, and location information. A second MSC (MSC-2) 16 communicates through a second Base Station (BS-2) 17 with a calling MS 18. When the called MS switches to voice mode, it registers with the HLR. Thereafter,

when the calling MS places a voice call to the called MS, MSC-2 queries the HLR for

location information. The HLR obtains a routing number from MSC-1 and returns the

routing number to MSC-2. The voice call is then set up) ([0019], Thus, if the calling MS

18 then attempts to place a voice call to the called MS while it is in data mode, the call

is immediately routed to voice mail, or the calling MS automatically receives a voice

announcement that the subscriber is not available because the called MS has canceled

its registration with the HLR.) ([0023], The HLR puts the called MS in a new state called

"data" in the user profile to indicate that the called MS is operating in the data mode)

([0030], The HLR looks for the DMI in the user profile at 34 and determines that the

called MS is in the data mode)

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate wherein said MS transmits to said node a feature code

indicating that said MS is in data mode when said data session begins, said node

encapsulating said SMS message into said IP packet only when said node has received

said feature code taught by Nguyen into the system of Laiho. One would have been

motivated to do so to allow the subscriber may then leave the mode his is in and taken

the incoming call. He can then go back and finish the ongoing call in the original mode.

6.   As to claim 4, Nguyen discloses wherein said node is a Mobile Service Switching

Center (see [0007], Mobile Switching Center (MSC-1, MSC-2 serving the MS).

7.   As to claim 7, Nguyen discloses wherein said node is a base station controller

(see figure 2, BS-1, BS-2).

8.   As to claim 16, Laiho discloses a Mobile Service Switching Center for delivering

a Short Message Service (SMS) message to a mobile station (MS) supporting both

voice services and data services, said Mobile Services Switching Center comprising:

means for determining whether said MS is currently involved in data session on a data

only carrier (col. 1, line 56, col. 1, line 63; col. 3, lines 39-40; col. 3, line 43 – cause

code);

Conversion logic for encapsulating said SMS message into an Internet Protocol (IP)

packet and routing said SMS message to said MS over said data only carrier as an

electronic mail message when said MS is involved in said data session (col. 3, lines 45-

51).

However, Laiho is silent to disclosing wherein said means for determining

comprises a feature code indicating that said MS is involved in said data session, said

feature code being sent by said MS at the start of said data session.

Nguyen et al. discloses wherein said means for determining comprises a feature

code indicating that said MS is involved in said data session, said feature code being

sent by said MS at the start of said data session ([0016], The called MS has a Home

Location Register (HLR) 15 that stores the called MS's user profile, status, and location

information. A second MSC (MSC-2) 16 communicates through a second Base Station

(BS-2) 17 with a calling MS 18. When the called MS switches to voice mode, it registers

with the HLR. Thereafter, when the calling MS places a voice call to the called MS,

MSC-2 queries the HLR for location information. The HLR obtains a routing number

from MSC-1 and returns the routing number to MSC-2. The voice call is then set up)

([0019], Thus, if the calling MS 18 then attempts to place a voice call to the called MS while it is in data mode, the call is immediately routed to voice mail, or the calling MS automatically receives a voice announcement that the subscriber is not available because the called MS has canceled its registration with the HLR.) ([0023], The HLR puts the called MS in a new state called "data" in the user profile to indicate that the called MS is operating in the data mode) ([0030], The HLR looks for the DMI in the user profile at 34 and determines that the called MS is in the data mode)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein said means for determining comprises a feature code indicating that said MS is involved in said data session, said feature code being sent by said MS at the start of said data session taught by Nguyen into the system of Laiho. One would have been motivated to do so to allow the subscriber may then leave the mode his is in and taken the incoming call. He can then go back and finish the ongoing call in the original mode.

9.   As to claim 17, Nguyen et al. discloses wherein said feature code is stored in a Visitor Location Register (Home Location Register, HLR) associated with said Mobile Service Switching Center (Mobile Switching Center, MSC) ([0007]).

10.   As to claim 32, Laiho discloses a method for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said method comprising:

Receiving at a node in wireless communication with a mobile station (MS) supporting

both voice services and data services said SMS message (col. 1, line 56; col. 1, line 63;

col. 3, lines 39-40;

Determining whether said MS is currently involved in a data session on said data only

carrier (col. 3, line 43 – cause code);

If not, routing said SMS message to said MS via said voice carrier (col.3, lines 38-40);

If so, encapsulating said SMS message into an Internet Protocol (IP) packet, and

routing said SMS message to said MS as an electronic mail message without disrupting

said data session (col. 3, lines 40-41, lines 46-51).

However, Laiho (6,061,572) is silent to disclosing wherein said MS transmits to

said node a feature code indicating that said MS is in data mode when said data

session begins from said MS to said node

Nguyen et al. discloses wherein said MS transmits to said node a feature code

indicating that said MS is in data mode when said data session begins from said MS to

said node ([0016], The called MS has a Home Location Register (HLR) 15 that stores

the called MS's user profile, status, and location information. A second MSC (MSC-2)

16 communicates through a second Base Station (BS-2) 17 with a calling MS 18. When

the called MS switches to voice mode, it registers with the HLR. Thereafter, when the

calling MS places a voice call to the called MS, MSC-2 queries the HLR for location

information. The HLR obtains a routing number from MSC-1 and returns the routing

number to MSC-2. The voice call is then set up) ([0019], Thus, if the calling MS 18 then

attempts to place a voice call to the called MS while it is in data mode, the call is

immediately routed to voice mail, or the calling MS automatically receives a voice

announcement that the subscriber is not available because the called MS has canceled

its registration with the HLR.) ([0023], The HLR puts the called MS in a new state called

"data" in the user profile to indicate that the called MS is operating in the data mode) ·

([0030], The HLR looks for the DMI in the user profile at 34 and determines that the

called MS is in the data mode).

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate wherein said MS transmits to said node a feature code

indicating that said MS is in data mode when said data session begins from said MS to

said node taught by Nguyen into the system of Laiho. One would have been motivated

to do so to allow the subscriber may then leave the mode his is in and taken the

incoming call. He can then go back and finish the ongoing call in the original mode.

11.   As to claim 33, Nguyen discloses storing said feature code within a Visitor

Location Register associated with said Mobile Service Switching Center ([0016], The

called MS has a Home Location Register (HLR) 15 that stores the called MS's user

profile, status, and location information. A second MSC (MSC-2) 16 communicates

through a second Base Station (BS-2) 17 with a calling MS 18. When the called MS

switches to voice mode, it registers with the HLR. Thereafter, when the calling MS

places a voice call to the called MS, MSC-2 queries the HLR for location information.

The HLR obtains a routing number from MSC-1 and returns the routing number to MSC-

2. The voice call is then set up) ([0019], Thus, if the calling MS 18 then attempts to ·

place a voice call to the called MS while it is in data mode, the call is immediately routed

to voice mail, or the calling MS automatically receives a voice announcement that the

subscriber is not available because the called MS has canceled its registration with the

HLR.) ([0023], The HLR puts the called MS in a new state called "data" in the user

profile to indicate that the called MS is operating in the data mode) ([0030], The HLR

looks for the DMI in the user profile at 34 and determines that the called MS is in the

data mode).

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

13.   Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the

combined system (Laiho – Nguyen) in view of Sexton et al. (U.S.Patent No. 6,614,772).

As to claim 14, the combination system (Laiho – Nguyen) discloses the limitations of

claim 3 above.

However, the combined system (Laiho – Nguyen) is silent to disclosing wherein said

network is a Code Division Multiple Access 2000 network

Sexton et al. discloses wherein said network is a Code Division Multiple Access 2000

network. (col. 2, lines 1-8

(All digital cellular systems, including EIA/TIA 553 Analog Mobile Phone System

(AMPS), IS-136 Time Division Multiple Access (TDMA) digital system, IS-95A Code

Division Multiple Access (CDMA) digital system, J-STD-008 (CDMA) PCS System, J-

STD-007 (PCS1900), J-STD-009 (TDMA), Global Standard for Mobiles (GSM) have

data transmission capabilities).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate wherein said network is a Code Division Multiple Access

network taught by Lee into the combined system (Laiho – Nguyen). One would have

been motivated to do so to compatible with existing networks and allow easy adoption.

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

15.   Claims 11, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Laiho (U.S.Patent No. 6,061,572) in view of Spielman et al. (U.S.Patent No. 6,560,318).

      As to claim 3, Laiho discloses a telecommunication system for delivering a Short

Message Service (SMS) message within a network capable of providing both voice

services on a voice carrier and data services on a data only carrier, said

telecommunication system comprising:

A mobile station (MS) supporting both voice services and data services, said MS being

currently involved in a data session on said data only carrier (col. 1, line 56; col. 1, line

63; col. 3, lines 39-40);

A node in wireless communication with said MS for receiving said SMS message

encapsulating said SMS message into an Internet Protocol (IP) packet and routing said

SMS message to said MS as an electronic mail message over said data only carrier

without disrupting said data session (col. 3, lines 45-51);

Wherein said node further operates to check whether said MS is involved in said data

session prior to encapsulating said SMS message into said IP packet, said node

transmitting said SMS message to said MS when said MS is not involved in said data

session (col. 3, lines 37-38);

A short message service center for routing said SMS to said node (see figure 1, SMSC,

MS).

However, Laiho is silent to disclosing wherein said node tags said electronic mail

message with a received indicator, said received indicator generate a response

message to said node when said MS opens said electronic mail message, said node

transmitting a delivery notification to said Short Message Service Center upon receipt

said response message.

Spielman et al. discloses wherein said node tags said electronic mail message

with a received indicator, said received indicator generate a response message to said

node when said MS opens said electronic mail message, said node transmitting a

delivery notification to said Short Message Service Center upon receipt said response

message (figure 1, SMS, col. 11, lines 15-25, The notification attribute 82f is another

example of a first object class where two notification device tags (MWI=8945551212,

PAGER=user@page.network.com) are stored for notification via a message waiting

indicator and a pager. Since the paging protocol uses SMTP, the pager notification

device tag has sufficient information for generation of the notification message for the

corresponding pager to receive the page as an e-mail client via the notification delivery

process 14a. In addition, the notification attribute 82f illustrates that multiple device tags

may be used to send a notification to respective multiple devices in response to the

corresponding and, namely reception of an urgent voicemail message).

 Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate wherein said node tags said electronic mail message with a

received indicator, said received indicator generate a response message to said node

when said MS opens said electronic mail message, said node transmitting a delivery

notification to said Short Message Service Center upon receipt said response message

taught by Spielman into the system of Laiho. One would have been motivated to do so

to provide notification information for non-local devices due to the nature in which the

subscriber preference information and device information are stored and managed in

the subscriber directory.

16.   As to claim 38, Laiho discloses a telecommunication system for delivering a

Short Message Service (SMS) message within a network capable of providing both

voice services on a voice carrier and data services on a data only carrier, said

telecommunication system comprising:

A mobile station (MS) supporting both voice services and data services, said MS being

currently involved in a data session on said data only carrier (col. 1, line 56; col. 1, line

63; col. 3, lines 39-40);

A node in wireless communication with said MS for receiving said SMS message

encapsulating said SMS message into an Internet Protocol (IP) packet and routing said

SMS message to said MS as an electronic mail message over said data only carrier

without disrupting said data session (col. 3, lines 45-51);

Wherein said node further operates to check whether said MS is involved in said data

session prior to encapsulating said SMS message into said IP packet, said node

transmitting said SMS message to said MS when said MS is not involved in said data

session (col. 3, lines 37-38);

A short message service center for routing said SMS to said node (see figure 1, SMSC,

MS);

Means for receiving said SMS message from a Short Message Service Center (col. 4,

lines 7-10).

However, Laiho fails to disclose tagging said electronic mail message with a

received indicator; generating, by said received indicator, a response message to said

node when said MS opens said electronic mail message; and transmitting a delivery

notification from said node to said Short Message Service Center upon receipt of said

response message.

Spielman et al. discloses tagging said electronic mail message with a received

indicator; generating, by said received indicator, a response message to said node

when said MS opens said electronic mail message; and transmitting a delivery

notification from said node to said Short Message Service Center upon receipt of said

response message (figure 1, SMS, col. 11, lines 15-25, The notification attribute 82f is

another example of a first object class where two notification device tags

(MWI=8945551212, PAGER=user@page.network.com) are stored for notification via a

message waiting indicator and a pager. Since the paging protocol uses SMTP, the

pager notification device tag has sufficient information for generation of the notification

message for the corresponding pager to receive the page as an e-mail client via the

notification delivery process 14a. In addition, the notification attribute 82f illustrates that

multiple device tags may be used to send a notification to respective multiple devices in

response to the corresponding and, namely reception of an urgent voicemail message).

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate tagging said electronic mail message with a received

indicator; generating, by said received indicator, a response message to said node

when said MS opens said electronic mail message; and transmitting a delivery

notification from said node to said Short Message Service Center upon receipt of said

response message taught by Spielman into the system of Laiho. One would have been

motivated to do so to provide notification information for non-local devices due to the

nature in which the subscriber preference information and device information are stored

and managed in the subscriber directory.

Claim Rejections - 35 USC § 103

17.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

18.   Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho

(U.S.Patent No. 6,061,572) in view of Heutschi et al. (U.S.Patent No. 6,968,383) .

As to claim 13, Laiho discloses a telecommunication system for delivering a

Short Message Service (SMS) message within a network capable of providing both

voice services on a voice carrier and data services on a data only carrier, said

telecommunication system comprising:

A mobile station (MS) supporting both voice services and data services, said MS being

currently involved in a data session on said data only carrier (col. 1, line 56; col. 1, line

63; col. 3, lines 39-40);

A node in wireless communication with said MS for receiving said SMS message

encapsulating said SMS message into an Internet Protocol (IP) packet and routing said

SMS message to said MS as an electronic mail message over said data only carrier

without disrupting said data session (col. 3, lines 45-51);

Wherein said node further operates to check whether said MS is involved in said data

session prior to encapsulating said SMS message into said IP packet, said node

transmitting said SMS message to said MS when said MS is not involved in said data

session (col. 3, lines 37-38);

Wherein said electronic mail message is routed to said MS using an electronic mail

address for said MS (col. 3, lines 45-51).

However, Laiho is silent to disclosing wherein said electronic mail address

includes an International Mobile subscriber Identity number of said MS at an Internet

Service provider of said MS.

Heutschi et al. discloses Wherein said electronic mail message is routed to said

MS using an electronic mail address for said MS; and wherein said electronic mail

address includes an International Mobile subscriber Identity number of said MS at an

Internet Service provider of said MS (col. 3, lines 55-65, These transmission criteria are

linked in the data base 50 with the address of the user to whom the data have to be

transmitted. A list of user addresses can preferably be entered, for example a list of all

members of an association or a firm, who are supposed to receive certain data. The

transmission of advertisements to all users or to larger user groups can thereby be

programmed, for example. Depending upon the broadcasting channel, the user address

can be formulated differently; it corresponds, for example, to the IMSI (international

mobile subscriber identity) or to the MSISDN (mobile subscriber identification number)

of the user in the case of a SMS message, an e-mail address in the case of an e-mail, a

normal mailing address in the case of a normal mail dispatch, etc.).

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate wherein said electronic mail address includes an

International Mobile subscriber Identity number of said MS at an Internet Service

provider of said MS into the system of Laiho. One would have been motivated to do so

to offer data broadcast which avoids these drawbacks.

Claim Rejections - 35 USC § 103

19.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

20.   Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Laiho (U.S.Patent No. 6,061,572) in view of Spielman et al. (U.S.Patent No. 6,560,318).

As to claim 19, Laiho discloses a Mobile Service Switching Center for delivering

a Short Message Service (SMS) message to a mobile station (MS) supporting both

voice services and data services, said Mobile Services Switching Center comprising:

means for determining whether said MS is currently involved in data session on a data

only carrier (col. 1, line 56, col. 1, line 63; col. 3, lines 39-40; col. 3, line 43 – cause

code);

Conversion logic for encapsulating said SMS message into an Internet Protocol (IP)

packet and routing said SMS message to said MS over said data only carrier as an

electronic mail message when said MS is involved in said data session (col. 3, lines 45-

51);

However, Laiho is silent to disclosing receiving said SMS message from a short

message service center wherein said conversion logic tags said electronic mail

message with a received indicator, said received indicator generate a response

message to said node when said MS opens said electronic mail message, said node

transmitting a delivery notification to said Short Message Service Center upon receipt

said response message.

Spielman et al. discloses receiving said SMS message from a short message

service center wherein said conversion logic tags said electronic mail message with a

received indicator, said received indicator generate a response message to said node

when said MS opens said electronic mail message, said node transmitting a delivery

notification to said Short Message Service Center upon receipt said response message

(figure 1, SMS, col. 11, lines 15-25, The notification attribute 82f is another example of a

first object class where two notification device tags (MWI=8945551212,

PAGER=user@page.network.com) are stored for notification via a message waiting

indicator and a pager. Since the paging protocol uses SMTP, the pager notification

device tag has sufficient information for generation of the notification message for the

corresponding pager to receive the page as an e-mail client via the notification delivery

process 14a. In addition, the notification attribute 82f illustrates that multiple device tags

may be used to send a notification to respective multiple devices in response to the

corresponding and, namely reception of an urgent voicemail message).

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate receiving said SMS message from a short message service

center wherein said conversion logic tags said electronic mail message with a received

indicator, said received indicator generate a response message to said node when said

MS opens said electronic mail message, said node transmitting a delivery notification to

said Short Message Service Center upon receipt said response message taught by

Spielman into the system of Laiho. One would have been motivated to do so to provide

notification information for non-local devices due to the nature in which the subscriber

preference information and device information are stored and managed in the

subscriber directory.

21.   As to claim 20, Spielman discloses transmitting a delivery notification message to

said Short Message Service Center upon receipt of said response message (figure 1,

SMS, col. 11, lines 15-25, The notification attribute 82f is another example of a first

object class where two notification device tags (MWI=8945551212,

PAGER=user@page.network.com) are stored for notification via a message waiting

indicator and a pager. Since the paging protocol uses SMTP, the pager notification

device tag has sufficient information for generation of the notification message for the

corresponding pager to receive the page as an e-mail client via the notification delivery

process 14a. In addition, the notification attribute 82f illustrates that multiple device tags

may be used to send a notification to respective multiple devices in response to the

corresponding and, namely reception of an urgent voicemail message).

Claim Rejections - 35 USC § 103

22.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

23.   Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho (U.S.Patent No. 6,061,572) in view of Heutschi et al. (U.S.Patent No. 6,968,383).

        As to claim 22, Laiho discloses a Mobile Service Switching Center for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said Mobile Services Switching Center comprising: means for determining whether said MS is currently involved in data session on a data only carrier (col. 1, line 56, col. 1, line 63; col. 3, lines 39-40; col. 3, line 43 – cause code);

Conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session (col. 3, lines 45-51); electronic mail message is routed to said MS using an electronic mail address for said MS (col. 3, line 62 – col.4, line 2).

        However, Laiho is silent to disclosing wherein said electronic mail address includes an International Mobile subscriber Identity number of said MS at an Internet Service provider of said MS.

        Heutschi et al. discloses Wherein said electronic mail message is routed to said MS using an electronic mail address for said MS; and wherein said electronic mail

address includes an International Mobile subscriber Identity number of said MS at an

Internet Service provider of said MS (col. 3, lines 55-65, These transmission criteria are

linked in the data base 50 with the address of the user to whom the data have to be

transmitted. A list of user addresses can preferably be entered, for example a list of all

members of an association or a firm, who are supposed to receive certain data. The

transmission of advertisements to all users or to larger user groups can thereby be

programmed, for example. Depending upon the broadcasting channel, the user address

can be formulated differently; it corresponds, for example, to the IMSI (international

mobile subscriber identity) or to the MSISDN (mobile subscriber identification number)

of the user in the case of a SMS message, an e-mail address in the case of an e-mail, a

normal mailing address in the case of a normal mail dispatch, etc.).

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate wherein said electronic mail address includes an

International Mobile subscriber Identity number of said MS at an Internet Service

provider of said MS into the system of Laiho. One would have been motivated to do so

to offer data broadcast which avoids these drawbacks.

Claim Rejections - 35 USC § 103

24.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

25.   Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho

(U.S.Patent No. 6,061,572) in view of Nguyen et al. (U.S.Patent No. 2002/0111167).

As to claim 24, Laiho discloses a system for delivering a Short Message Service (SMS)

message to a mobile station (MS) supporting both voice services and data services,

said system comprising:

Means for determining whether said MS is currently involved in a data session on a day

only carrier (col. 1, lines 56, col. 1, line 63, col.3, lines 39-40, col. 3, line 43 – cause

code);

Conversion logic for encapsulating said SMS message into an Internet Protocol (IP)

packet and routing said SMS message to said MS over said data only carrier as an

electronic mail message when said MS is involved in said data session (col.3, lines 45-

51).

However, Laiho fails to disclose that the system is a Base Station Controller.

Nguyen discloses that the system is a Base Station Controller (see figure 2, Base

Station BS-1); Wherein said means for determining comprises a feature code indicating

that said MS is involved in said data session, said feature code being sent by said MS

at the start of said data session ([0016], The called MS has a Home Location Register

(HLR) 15 that stores the called MS's user profile, status, and location information. A

second MSC (MSC-2) 16 communicates through a second Base Station (BS-2) 17 with

a calling MS 18. When the called MS switches to voice mode, it registers with the HLR.

Thereafter, when the calling MS places a voice call to the called MS, MSC-2 queries the

HLR for location information. The HLR obtains a routing number from MSC-1 and

returns the routing number to MSC-2. The voice call is then set up) ([0019], Thus, if the

calling MS 18 then attempts to place a voice call to the called MS while it is in data

mode, the call is immediately routed to voice mail, or the calling MS automatically

receives a voice announcement that the subscriber is not available because the called

MS has canceled its registration with the HLR.) ([0023], The HLR puts the called MS in

a new state called "data" in the user profile to indicate that the called MS is operating in

the data mode) ([0030], The HLR looks for the DMI in the user profile at 34 and

determines that the called MS is in the data mode)

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate Wherein said means for determining comprises a feature

code indicating that said MS is involved in said data session, said feature code being

sent by said MS at the start of said data session taught by Nguyen into the system of

Laiho. One would have been motivated to do so to allow the subscriber may then leave

the mode his is in and taken the incoming call. He can then go back and finish the

ongoing call in the original mode.

Claim Rejections - 35 USC § 103

26.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

27.   Claims 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Laiho (U.S.Patent No. 6,061,572) in view of Nguyen et al. (U.S.Patent No.

2002/0111167) and in further view of Spielman et al. (U.S.Patent No. 6,560,318).

As to claim 27, Laiho discloses a system for delivering a Short Message Service

(SMS) message to a mobile station (MS) supporting both voice services and data

services, said system comprising:

Means for determining whether said MS is currently involved in a data session on a day

only carrier (col. 1, lines 56, col. 1, line 63, col.3, lines 39-40, col. 3, line 43 – cause

code);

Conversion logic for encapsulating said SMS message into an Internet Protocol (IP)

packet and routing said SMS message to said MS over said data only carrier as an

electronic mail message when said MS is involved in said data session (col.3, lines 45-

51).

However, Laiho fails to disclose that the system is a Base Station Controller.

Nguyen discloses that the system is a Base Station Controller (see figure 2, Base

Station BS-1);

It would have been obvious for one skilled in the art at the time of the invention to

include a BSC. The motivation to modify Laiho with Nguyen is so that increased network

capacity can be achieved.

However, the combined system (Laiho – Nguyen) are silent to disclosing wherein said conversion logic tags said electronic mail message with a received indicator, said received indicator generating a response message to said Base Station Controller when said MS opens said electronic mail message.

Spielman et al. discloses wherein said conversion logic tags said electronic mail message with a received indicator, said received indicator generating a response message to said Base Station Controller when said MS opens said electronic mail message (figure 1, SMS, col. 11, lines 15-25, The notification attribute 82f is another example of a first object class where two notification device tags (MWI=8945551212, PAGER=user@page.network.com) are stored for notification via a message waiting indicator and a pager. Since the paging protocol uses SMTP, the pager notification device tag has sufficient information for generation of the notification message for the corresponding pager to receive the page as an e-mail client via the notification delivery process 14a. In addition, the notification attribute 82f illustrates that multiple device tags may be used to send a notification to respective multiple devices in response to the corresponding and, namely reception of an urgent voicemail message).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein said node tags said electronic mail message with a received indicator, said received indicator generate a response message to said node when said MS opens said electronic mail message, said node transmitting a delivery notification to said Short Message Service Center upon receipt said response message taught by Spielman into the system of Laiho. One would have been motivated to do so

to provide notification information for non-local devices due to the nature in which the

subscriber preference information and device information are stored and managed in

the subscriber directory.

28.   As to claim 28, Spielman et al. discloses transmitting a delivery notification

message to said Short Message Service Center upon receipt of said response message

(figure 1, SMS, col. 11, lines 15-25, The notification attribute 82f is another example of a

first object class where two notification device tags (MWI=8945551212,

PAGER=user@page.network.com) are stored for notification via a message waiting

indicator and a pager. Since the paging protocol uses SMTP, the pager notification

device tag has sufficient information for generation of the notification message for the

corresponding pager to receive the page as an e-mail client via the notification delivery

process 14a. In addition, the notification attribute 82f illustrates that multiple device tags

may be used to send a notification to respective multiple devices in response to the

corresponding and, namely reception of an urgent voicemail message).

Claim Rejections - 35 USC § 103

29.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

30.   Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho

(U.S.Patent No. 6,061,572) in view of Heutschi et al. (U.S.Patent No. 6,968,383) .

As to claim 30, Laiho discloses a telecommunication system for delivering a

Short Message Service (SMS) message within a network capable of providing both

voice services on a voice carrier and data services on a data only carrier, said

telecommunication system comprising:

A mobile station (MS) supporting both voice services and data services, said MS being

currently involved in a data session on said data only carrier (col. 1, line 56; col. 1, line

63; col. 3, lines 39-40);

A node in wireless communication with said MS for receiving said SMS message

encapsulating said SMS message into an Internet Protocol (IP) packet and routing said

SMS message to said MS as an electronic mail message over said data only carrier

without disrupting said data session (col. 3, lines 45-51);

Wherein said node further operates to check whether said MS is involved in said data

session prior to encapsulating said SMS message into said IP packet, said node

transmitting said SMS message to said MS when said MS is not involved in said data

session (col. 3, lines 37-38);

Wherein said electronic mail message is routed to said MS using an electronic mail

address for said MS (col. 3, lines 45-51).

However, Laiho is silent to disclosing wherein said electronic mail address

includes an International Mobile subscriber Identity number of said MS at an Internet

Service provider of said MS.

Heutschi et al. discloses Wherein said electronic mail message is routed to said

MS using an electronic mail address for said MS; and wherein said electronic mail

address includes an International Mobile subscriber Identity number of said MS at an

Internet Service provider of said MS (col. 3, lines 55-65, These transmission criteria are

linked in the data base 50 with the address of the user to whom the data have to be

transmitted. A list of user addresses can preferably be entered, for example a list of all

members of an association or a firm, who are supposed to receive certain data. The

transmission of advertisements to all users or to larger user groups can thereby be

programmed, for example. Depending upon the broadcasting channel, the user address

can be formulated differently; it corresponds, for example, to the IMSI (international

mobile subscriber identity) or to the MSISDN (mobile subscriber identification number)

of the user in the case of a SMS message, an e-mail address in the case of an e-mail, a

normal mailing address in the case of a normal mail dispatch, etc.).

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate wherein said electronic mail address includes an

International Mobile subscriber Identity number of said MS at an Internet Service

provider of said MS into the system of Laiho. One would have been motivated to do so

to offer data broadcast which avoids these drawbacks.

Claim Rejections - 35 USC § 103

31.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

32.   Claims 36, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Laiho (U.S.Patent No. 6,061,572) in view of Patel et al. (U.S.Patent No. 6,400,950 B1).

As to claim 36, Laiho discloses a method for delivering a Short Message Service

(SMS) message within a network capable of providing both voice services on a voice

carrier and data services on a data only carrier, said method comprising:

Receiving at a node in wireless communication with a mobile station (MS) supporting

both voice services and data services said SMS message (col. 1, line 56; col. 1, line 63;

col. 3, lines 39-40;

Determining whether said MS is currently involved in a data session on said data only

carrier (col. 3, line 43 – cause code);

If not, routing said SMS message to said MS via said voice carrier (col.3, lines 38-40);

If so, encapsulating said SMS message into an Internet Protocol (IP) packet, and

routing said SMS message to said MS as an electronic mail message without disrupting

said data session (col. 3, lines 40-41, lines 46-51).

However, Laiho fails to disclose wherein said node is a Base Station Controller,

and wherein said step of routing further comprises: determining, by said Base Station

Controller, routing information associated with said MS for said data session; and

delivering said electronic mail message from said Base Station Controller to said MS

using said routing information.

Patel et al. discloses wherein said node is a Base Station Controller, and wherein

said step of routing further comprises: determining, by said Base Station Controller,

routing information associated with said MS for said data session; and delivering said

electronic mail message from said Base Station Controller to said MS using said routing

information (col. 4, lines 6-18, when an MS 20 wants to register with the H.323 system

100, e.g., when the MS 20 powers on, the MS 20 transmits a location update message

to the BTS 24, which forwards the location update message to the A-bis Gateway 140.

The A-bis Gateway 140 converts the location update message into an Internet Protocol

(IP) packet for transmission to the MSC 14 via BSC 23. The MSC 14, in turn, transmits

an H.225 Registration Request (RRQ) message 115, which includes a subscriber

number and other alias'of the IMSI number 122, such as an e-mail address, to the

Gatekeeper 180 over the LAN backbone 110. Thereafter, the Gatekeeper 180 stores

routing information 187, e.g., the IP address for the MSC 14 and an associated port

number for the MS 20, within a subscriber record database 185 within the Gatekeeper

180).

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to incorporate wherein said node is a Base Station Controller, and wherein

said step of routing further comprises: determining, by said Base Station Controller,

routing information associated with said MS for said data session; and delivering said

electronic mail message from said Base Station Controller to said MS using said routing

information taught by Patel into the system of Laiho. One would have been motivated to

do so to provide efficient de-registration of multiple mobile station utilizing H.323

protocols.

33.   As to claim 39, Patel et al. discloses routing said electronic mail message to said

MS using an electronic mail address for said MS (col. 4, lines 6-18, when an MS 20

wants to register with the H.323 system 100, e.g., when the MS 20 powers on, the MS

20 transmits a location update message to the BTS 24, which forwards the location

update message to the A-bis Gateway 140. The A-bis Gateway 140 converts the

location update message into an Internet Protocol (IP) packet for transmission to the

MSC 14 via BSC 23. The MSC 14, in turn, transmits an H.225 Registration Request

(RRQ) message 115, which includes a subscriber number and other alias'of the IMSI

number 122, such as an e-mail address, to the Gatekeeper 180 over the LAN backbone

110. Thereafter, the Gatekeeper 180 stores routing information 187, e.g., the IP address

for the MSC 14 and an associated port number for the MS 20, within a subscriber

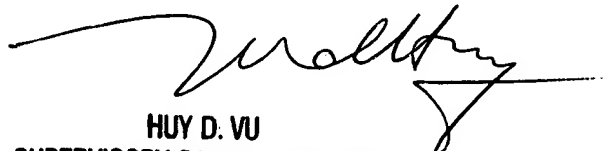record database 185 within the Gatekeeper 180).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-

3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/26/07

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